

**FIGURE 1**  
**DATA SET 1**

General Gene Marker Type	Examples of Gene Types	Gene Marker CYP	Polymorphisms	Genetic Susceptibility ranking						Dietary and lifestyle advice	
				Links with Cancer susceptibilities	Links with higher risks of cancer susceptibility	Homozygote or heterozygote relative to wild type	Reduces susceptibility	Moderate increase in susceptibility	Normal susceptibility	Higher susceptibility	
	Genes that code for enzymes responsible for the detoxification of xenobiotics in Phase I metabolism	Cyp1A1-A (Wild type)	Colorectal, urinary bladder, breast, oral cavity, stomach, and lung cancers	Homozygote							Reduce consumption of sources of Xenobiotics (e.g PAH) such as for example found in, for example, char-grilled red meat and smoked fish
		Cyp1A1-C	Colorectal, urinary bladder, breast, oral cavity, stomach, and lung cancers	Homozygote							Avoid consumption of sources of Xenobiotics (e.g PAH) found in, for example, char-grilled red meat and smoked fish
				Heterozygotes							Avoid consumption of sources of Xenobiotics (e.g PAH) found in, for example, char-grilled red meat and smoked fish
		lle>Val polymorphism	Colorectal, urinary bladder, breast, oral cavity, stomach, and lung cancers	Homozygote							Avoid consumption of sources of Xenobiotics (e.g PAH) found in, for example, char-grilled red meat and smoked fish
	NAT1			Heterozygotes							Avoid consumption of sources of Xenobiotics (e.g PAH) found in, for example, char-grilled red meat and smoked fish
		NAT1*4 (wild type)		Homozygote							Reduce consumption of potential procarcinogens (e.g PAH) found in, for example, char-grilled red meat and smoked fish
		NAT1*0	Colon cancer	Homozygote							Increase consumption of food products known to induce Phase II metabolism e.g increase consumption of fruit and vegetables, particularly cruciferous vegetables such as broccoli and members of the allium family such as garlic and onion

**DATA SET 2**

Figure 2

